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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,256	02/17/2004	Michael L. O'Banion	0275Y-625COC	3430

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EXAMINER

MITCHELL, KATHERINE W

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10780,256	Applicant(s) O'BANION ET AL.	
	Examiner Katherine W. Mitchell	Art Unit 3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 85-106 is/are pending in the application.
- 4a) Of the above claim(s) 99-106 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 85-98 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

yw

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 85-98, drawn to fastener, classified in class 411, subclass 456.
 - II. Claims 99-106, drawn to method of assembly with a fastener, classified in class 29, subclass 592.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the fastener could be used with a single substrate, to hang pictures for example.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Jeff Urian on March 25 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 85-98. Affirmation of this election must be made by applicant in replying to this Office action. Claims 99-106 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Because of the inclusion of the fastener details in the method claims, examiner offered to allow applicant to add the method claims back in the case if, and after, the fastener is allowed, as long as the method claims all the limitations of any allowed fastener, and applicant accepted the offer.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

5. The information disclosure statement filed 4/15/2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because documents 5,6,7, and 8 do not exist – that patent number, date, and inventor name are not valid. It has been placed in the application file, but the information referred to therein as regards to documents 5,6,7, and 8 has not been considered as to the merits. ALL OTHER DOCUMENTS WERE CONSIDERED. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

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Examiner notes for the record the exceptionally thorough job in preparing the IDS, and has tried to determine to what documents 5,6,7, and 8 refer, since the submission was so exceptionally thorough and on point, and documents 5,6,7, and 8 are obviously only typing errors. Examiner has located what appear to be these documents in a related application, and has listed these on the enclosed form 892. If examiner's documents are indeed those intended by applicant, applicant will NOT need to submit an additional IDS and fee and the documents WILL be listed on the front of any patent issuing from this application.

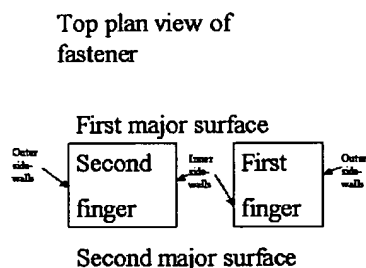
Drawings

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show 50" as described in the specification para [0065] as appearing in Fig 11, or first set of teeth 40 as described for Fig 3 in paragraph [0055]. Also, Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the

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remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. Examiner is assuming, based on an interview with attorney in related case 10/780072, that the major surfaces and sidewalls are arranged as below:



8. Fig 4 should be described as a front view, not a side view, if Fig 3 is a side view. Examiner assumed teeth not labeled are teeth 40.

Specification

9. The disclosure is objected to because of the following informalities: the claim to priority in the first sentence should be to USP 6719512, not serial number 10/176998.

10. The abstract of the disclosure is objected to because it refers to embodiments not claimed in this application. It should be amended to reflect the embodiment claimed for clarity. Correction is required. See MPEP § 608.01(b).

Appropriate correction is required.

Claim Objections

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11. Claim 85 includes the limitation that the first and second teeth extend "axially" along a portion of said stem, but never defines the axis. There are numerous axis-es for any three dimensional figure. Similarly, claim 88 includes an undefined axial direction. Examiner is examining broadly to include any axis.

ax-is (ăk'sīs) noun

1. *A straight line about which a body or geometric object rotates or may be conceived to rotate.*
2. *Mathematics. a. An unlimited line, half-line, or line segment serving to orient a space or a geometric object, especially a line about which the object is symmetric. b. A reference line from which distances or angles are measured in a coordinate system.*
3. *A center line to which parts of a structure or body may be referred.*¹

12. Claims 89 and 90 are objected to because the cross-section is not clearly identified. It appears from the drawings and specification that applicant means --said stem having a cross section formed by an imaginary cut perpendicular to the longitudinal axis--. Examiner suggests defining such a cross section in claim 85 so that it can be referred to without problems in subsequent dependent claims. Examiner will not consider this a narrowing limitation when considering any amendment.

13. Claim 91 is objected to because of the following informalities:

14. It is an improper wording to describe one or more of a list of alternatives. A Markush Group and its application are discussed in the MPEP Paragraph 2173.05(h).

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See Ex parte Markush, 1925 C.D. 126 (Comm'r Pat. 1925).

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Ex parte Markush sanctions claiming a genus expressed as a group consisting of certain specified materials. Inventions in metallurgy, refractories, ceramics, pharmacy, pharmacology and biology are most frequently claimed under the Markush formula but purely mechanical features or process steps may also be claimed by using the Markush style of claiming. See *Ex parte Head*, 214 USPQ 551 (Bd. App. 1981); *In re Gaubert*, 524 F.2d 1222, 187 USPQ 664 (CCPA 1975); and *In re Hamisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980). It is improper to use the term "comprising" instead of "consisting of." *Ex parte Dotter*, 12 USPQ 382 (Bd. App. 1931).

The use of Markush claims of diminishing scope should not, in itself, be considered a sufficient basis for objection to or rejection of claims. However, if such a practice renders the claims indefinite or if it results in undue multiplicity, an appropriate rejection should be made.

Similarly, the double inclusion of an element by members of a Markush group is not, in itself, sufficient basis for objection to or rejection of claims. Rather, the facts in each case must be evaluated to determine whether or not the multiple inclusion of one or more elements in a claim renders that claim indefinite. The mere fact that a compound may be embraced by more than one member of a Markush group recited in the claim does not necessarily render the scope of the claim unclear. For example, the Markush group, "selected from the group consisting of amino, halogen, nitro, chloro and alkyl" should be acceptable even though "halogen" is generic to "chloro."

The materials set forth in the Markush group ordinarily must belong to a recognized physical or chemical class or to an art-recognized class. However, when the Markush group occurs in a claim reciting a process or a combination (not a single compound), it is sufficient if the members of the group are disclosed in the specification to possess at least one property in common which is mainly responsible for their function in the claimed relationship, and it is clear from their very nature or from the prior art that all of them possess this property. While in the past the test for Markush-type claims was applied as liberally as possible, present practice which holds that claims reciting Markush groups are not generic claims (**MPEP § 803**) may subject the groups to a more stringent test for propriety of the recited members. Where a Markush expression is applied only to a portion of a chemical compound, the propriety of the grouping is determined by a consideration of the compound as a whole, and does not depend on there being a community of properties in the members of the Markush expression.

When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper.

Appropriate correction is required.

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15. Further, claim 91 includes the phrase "ram-type" which renders the claim unclear because it is unclear exactly what structure is intended by "ram-type", especially since the included alternate appears to be a "ram-type" device to examiner.

16. Claim 94 is being discussed here for clarification. The interior is claimed as concave, and the exterior is claimed as convex, but they are just the two faces of a formed sheet of metal. As best understood, every planar surface that has been curved would have one face considered convex and one face considered concave, depending on orientation. If this is not what is intended, applicant needs to clarify and point out the feature in the drawings.

Claim Rejections - 35 USC § 102

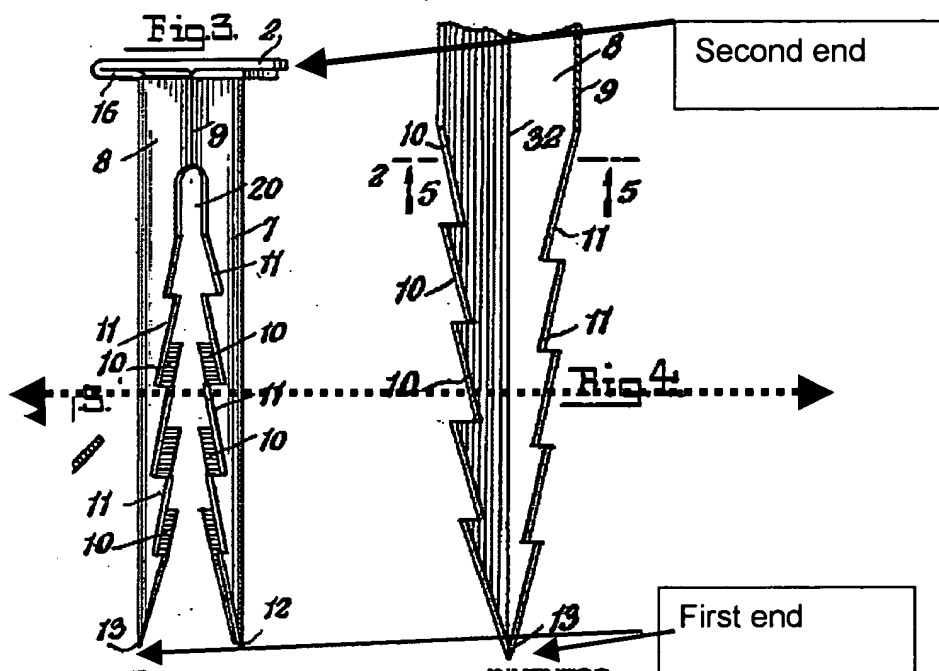
17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 85-91 and 93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Gisondi USP 2745308.

Re claim 85: Gisondi teaches in Figs 1-4 and col 2 lines 29-65 a nail capable of fastening framing members together comprising:



- a first end (13) configured to pierce framing members
- a second end (2) configured to receive a driving force
- a stem (8) extending between first and second ends, having an interior surface (concave interior –shown in Fig 4) and exterior surface (concave exterior shown on left in Fig 3) separated by 1st and 2nd edges (thickness of metal forming “11” and “10” respectively in Fig 4)
- a 1st set of teeth 11 extending axially along a portion of first edge
- a 2nd set of teeth 10 extending axially along a portion of second edge (see also col 2 lines 29-65)

Re claim 86: Fig 3 shows the lip (projecting past stem 8 at 16) which is capable of engaging a framing member

Re claim 87: Fig 3 shows each tooth having a radially extending surface

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substantially parallel to said lip (flat upper edge of tooth) (all parallel to dotted line drawn in by examiner)

Re claim 88: Figs 3 and 4 show each tooth axially staggered relative to one another.

Re claim 89: Figs 3 and 4 show the lower portion of the stem reducing in cross section as the stem extends toward the first end. Note – examiner is defining cross section as viewed “cut” by examiner’s dotted line in Fig 3 and 4.

Re claim 90: A flattened “V” shape (col 2 lines 37-47) is considered substantially “C” shaped.

Re claim 91: The second end 2 is configured to be capable of being driven by an air nailer or ram-type device.

Re claim 93: Fig 7 shows the 1st and 2nd ends (of 8) resilient and flexing toward one another as the nail is penetrating through a substrate. The actual substrate is not being positively claimed, as it involves the method of use in an apparatus claim.

Re claim 94: The interior is concave, and the exterior is convex, but they are just the two faces of a formed sheet of metal. As best understood, every planar surface that has been curved would have one face considered convex and one face considered concave, depending on orientation.

Re claim 95: Fig 7 shows the first end curved relative to the stem.

Re claim 96: First end 13 is a point in Figs 1-4 and 7.

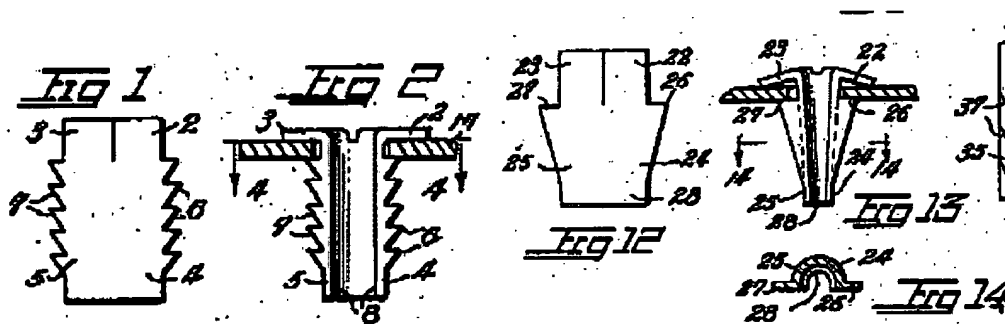
Re claims 97-98: Fig 4 shows 1st and 2nd edges at 9 (above cut line 5 in Fig 4)

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as substantially parallel to each other. That same Figure 4 shows 1st and 2nd edges angled relative to one another (see for example, comparing both surfaces 10 to both surfaces 11 labeled in Fig 4.) {Applicant has not specified exactly how the edges must be parallel. For example, / and \ are parallel in that their "top face" lies in the same plane – i.e, they are on the plate of the paper. However, their orientation relative to the longitudinal axis of the paper is not parallel.}

19. Claims 85-91 and 93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Lombard USP 2110959.

Re claim 85: Lombard teaches in Figs 1-2 and Figs 12-14 and page 2 col 2 line 66 – page 3 col 1 line 64 a nail capable of fastening framing members together comprising:



- a first end (at 8) configured to pierce framing members – examiner notes the framing members could be styrofoam, which the ends would inherently pierce)
- a second end (2,3) configured to receive a driving force
- a stem (4,5) extending between first and second ends, having an interior surface (concave interior –shown in Fig 3-4 of patent) and exterior surface

(convex exterior shown in Fig 3-4 of patent) separated by 1st and 2nd edges (thickness of metal in Figs 2)

- a 1st set of teeth 6 extending axially along a portion of first edge
- a 2nd set of teeth 7 extending axially along a portion of second edge (see also col 2 lines 29-65)

Re claim 86: Fig 2 shows the lip (projecting past stem) which is capable of engaging a framing member

Re claim 87: Fig 1 shows each tooth having a radially extending surface substantially parallel to said lip (flat upper edge of tooth)

Re claim 89: Figs 12-14 and page 3 col 2 line 54 – page 4 col 1 line 25 (taper) show the lower portion of the stem reducing in cross section as the stem extends toward the first end. Note – examiner is defining cross section as viewed “cut” by examiner’s dotted line in Fig 3 and 4. Note that Lombard is explicit that any embodiment can taper.

Re claim 90: Fig 3,4, and 14 show the stem substantially “C” shaped.

Re claim 91: The second end 2,3 is configured to be capable of being driven by an air nailer or ram-type device.

Re claim 92: The embodiment taught in Figs 12-14 has the 1st and 2nd ends and stems configured to allow nesting.

Re claim 94: The interior is concave, and the exterior is convex per Figures 3,4,

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and 14, but they are just the two faces of a formed sheet of metal. As best understood, every planar surface that has been curved would have one face considered convex and one face considered concave, depending on orientation.

Re claims 97-98: Fig 14 shows 1st and 2nd edges at as substantially parallel to each other. Fig 11 shows 1st and 2nd edges angled relative to one another. Examiner is considering the edges to be the face "thickness" of the plate forming the fastener.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katherine W. Mitchell whose telephone number is 703-305-6713. The examiner can normally be reached on Mon - Thurs 10 AM - 8 PM.

22. Note that examiner will have a new phone number after March 31, 2005:

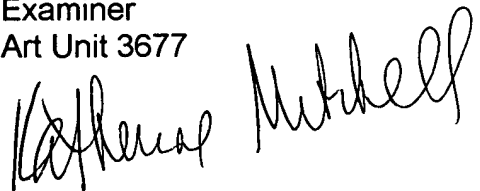
(571)272-7069.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on 703-306-4115. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Katherine W Mitchell
Examiner
Art Unit 3677

A handwritten signature in black ink, appearing to read 'Katherine W Mitchell', written in a cursive style.

Kwm
3/25/2005